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THE AMERICAN UROLOGICAL ASSOCIATION.[1]

By FERD. C. VALENTINE, M. D., New York City.

IT is a pleasant custom that demands from the retiring president of an association, a valedictory address. The usual practice of offering the details of some advance in science representing the president's investigations and work, makes the custom one of profit to the members.

When, however, as in the present case, the incumbent is keenly aware that those who conferred the distinction of presiding officer upon him are his masters, and he their pupil, he stands abashed by the consciousness that his own humble efforts for the benefit of science are too trifling for mention.

In this predicament, your president contemplated constituting this address a recital of the work of the individual members of the American Urological Association. To that end a request was sent each member for a memorandum of his literary contributions to the advance of urology, and a specific description of any new technique of examination or operation he might have devised.

Unfortunately for the success of this plan, the members of the association are so busy in practice, as to be somewhat dilatory in literary work. Besides, as those who have written much know, the difficulty of getting together, for any purpose, articles published at various times in numerous different organs, is almost certain to cause a busy man to fall short of its accomplishment. These facts were brought home to your president by the result of his request. Only fourteen of the members found time to respond at all. Consequently the original intention, of making

[1] Presidential address at the Fifth Annual Meeting of the American Urological Association, Boston, June 5 and 6, 1906.

this address a record of the work of the individual members, would, if carried out, have entailed omitting many most valuable contributions to urology.

Not wishing to present the subject otherwise than with the completeness which it merited, your president deemed it best to devote this address to the work accomplished during the administration closing to-day, by the association as a whole.

Membership—The present roster contains 265 names of active members. About 35 applications for membership will be offered at this meeting. The present members are distributed as follows:

The First Section—Comprising Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut has 35 members. This section is here mentioned as existing because it was organized in Boston on March 9 and will, it may safely be said, be accepted by the association at this annual meeting.

The Second Section—Embracing New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, West Virginia and the District of Columbia, has 115 members. This section was not formally organized as such until April 3, 1906. It too will, no doubt, be made a branch of the association during this meeting.

In the exercise of his general powers, however, your president called meetings of the association in New York every two months, during the administration now ending. The hearty coöperation of the members, the large attendances, the profound scientific value of the papers presented and of the discussions thereon, make their success a subject of justifiable pride. So highly was the work done appreciated in New York, that the Second Section at the meeting of April 3 adopted the minutes, the papers and the discussions of these meetings as its own, *ipse facto* approving the calls for the meetings.

The Third Section—Which embraces the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas and Tennessee, has 10 members.

The Fourth Section—Covering Kentucky, Ohio, Indiana, Illinois, Missouri, Michigan, Minnesota, Wisconsin and Iowa, has now 68 members. It was organized in Chicago on April 16, 1904. Meetings were held every two months and much very valuable scientific work was done.

The Fifth Section—Which consists of North and South Dakota, Nebraska, Kansas, Texas, New Mexico, Colorado, Wyoming, Montana, Idaho, Utah, Nevada, Arizona, California, Oregon and Washington, was organized in July, 1905. It now has 33 members. Meetings were held in January and April, 1906, and at each important papers were read and discussed.

Deaths of Active Members—Since organization, death has robbed us of William R. Blue of Louisville; Geo. Chismore of San Francisco; A. Palmer Dudley of New York; Isaac N. Love of New York; William Hutson Prioleau of Ashville; William R. Pryor of New York; and William E. Swan of Saratoga. Each one of these had made his mark, at least, upon the advance of urology in our country; each one was an enthusiast for science, and each one died in the full vigor of intellectual manhood. Not only has the association to deplore these losses, but the entire profession, as well as humanity at large, must mourn with us.

Deaths among Honorary Members—E. Galozzi of Naples was elected to honorary membership on January 7, 1903. The notification thereof was received at the home of this famous surgeon several days after his death.

On February 21, 1906, the scientific world was appalled by the news that on that date Max Nitze had died of apoplexy. The details appear in THE AMERICAN JOURNAL OF UROLOGY for April, 1906.

Present Status of the Association—We are, at this, our Fifth Annual Meeting, the youngest Urological Association in the world. We have no occasion to be ashamed of the scientific work accomplished, and we are justly proud of the individual contributions of our members to urology.

We are, however, hopefully far from perfection. We pray that none of those now living will ever be satisfied with the standard attained, however high it may become.

That leads your presiding officer to submit some suggestions for improvements that seem necessary for further success.

Constitution and By-Laws—With the growth of the association, the present document has outlived its usefulness. The committee appointed by my honored predecessor to revise the constitution and by-laws, is to report at this meeting. You are requested to give careful attention to the report, with the assurance

that all aid you lend the committee will certainly be for the benefit of the association.

New Members—The advance of urology is predicated as much upon the studies and experiences of the general practitioner, as it is upon those of the urological specialist. The presentation of such studies and experiences is of reciprocal benefit. No specialty whatever in the entire field of medicine and surgery can exist or advance without studies of the urine.

The requirements of science and of the association, therefore, demand an increase of membership. In endeavoring to obtain it, however, we cannot be too careful in the selections made. We do not need members for their annual contributions. We want men who can instruct us, and who desire instruction. Beyond all, we want men who will aid us in sustaining the dignity of the profession.

It seems it would be the part of wisdom to require proof, with each new application for membership, that the applicant is either a member in good standing in the American Medical Association, or a member in the same standing in his local County Society. A man who cannot meet this latter requirement at least, should be discouraged from aspiring to membership. This requirement, of course, is suggested as an addition to the others prescribed by the constitution.

Meetings—Ours is essentially a working association. Membership or election to office therein should never be sought merely for its utility as a title to append to published articles or books. Every member should contribute to the advance of urology by the preparation of papers or at least by discussion of those presented.

Each Section (or Branch) should hold regular bimonthly meetings. The dates of these can be fixed so as to prevent conflict with the meetings of the other Sections. Any Section would then be enabled to secure the presence at a meeting, of any member of another Section, upon whose special work it may desire to be intimately informed.

Discussions—It is advisable that each Section retain the services of a competent stenographer, in order that the discussions may be accurately reported. When this is impossible, each member who has extemporaneously discussed a paper should be

requested to at once write out his remarks for publication and forward them to the secretary of the Section.

Publication—Within three days after each meeting of a Section, the secretary thereof should be enabled to send a complete record of the transactions of that meeting to the editor of THE AMERICAN JOURNAL OF UROLOGY. It is only thus that all the members can be fully informed of the advances of urology made within the association. Moreover, our association's purpose being largely educational, non-members who read the JOURNAL will thus early derive the benefit of our work.

The practicability of the preceding suggestion, is demonstrated by recent issues of the JOURNAL. They contain scientific records of work that is stamped by originality and ability, and of which we cannot be otherwise than proud.

Arrangement of Programmes—An innovation in this respect, was tested at the called meetings.

The paper of the evening was divided as nearly as possible into the etiology, symptomatology, pathology, diagnosis and medical and surgical treatment. When the subject permitted, further divisions were made. The discussion on each division was assigned to the best man available for the special subject. Ten minutes' time was allotted each set discussion. After the set discussions, the subject was thrown open to general discussion, in which each participant was limited to five minutes.

The plan being purely experimental, received considerable comment, both favorable and otherwise.

Those who regarded the arrangement unfavorably, took the stand that it deprived the author of the evening's paper of the integral parts of his discourse.

The majority, however, coincided with the views of the promulgator of the plan. The intent was to give each of the gentlemen to whom a part of the evening's subject was assigned, the opportunity to concentrate in his ten minutes' discussion all he desired to say, and to exhaust the subject, from his viewpoint. When this coincided with that of the principal author, the reiteration but emphasized the benefits derived from the paper in chief; when differing, the confining of the views expressed to one particular part of the subject served to broaden its scope, by inspiring new thought.

The plan of circumscribing the field of each one who took part in the set discussions, was productive of good results in another important manner. It caused each participant to write his part in the programme of the evening for publication, and chiefly in consequence hereof, none transgressed beyond the ten minute limit, none wasted time on the usual complimentary phrases, and the majority were in a position to hand their discussions to the secretary on the same evening.

The general discussion was taken by the official stenographer and sent typewritten to each participant on the morning following the meeting. The authors were requested to immediately correct the copy and return it to the stenographer. True, delays sometimes occurred—in one instance causing a postponement in printing the report until two months later. Justice to those who are prompt should cause the manuscript of the procrastinators to be excluded from the records. The unpleasant duty thereof, would, of course, fall upon the chairman of the Section. He, however, when accepting the honor of caring for the interests of the association, must not look for a bed exclusively of roses.

Amalgamation with the American Medical Association—This subject, so I am informed, is likely to be brought forward again at this annual meeting. Two diametrically opposed views seem to prevail upon the question.

One set of men are in favor of our becoming the genito-urinary section of the association. If I am clear on the arguments that fortify their position, they are based upon the need of a thoroughly united profession, to the end that the American Medical Association may become a still stronger power in the land for public good.

The opponents of the proposition concede that our autonomy would not materially suffer, as it would make no real difference whether we held our annual meetings as a Section, or as an independent organization. They hold, however, that it would entail a radical change in our basic plan by the inevitable inclusion of diseases of the generative organs in our present work. Article I, Section 2, of the Constitution limits our objects to the "study of the medical and surgical diseases of the urinary organs of both sexes." This distinctly excludes genital diseases, venereal diseases, and syphilis.

As mentioned before in this address, the limitation to diseases of the urinary organs appeals to general practitioners as well as to those devoted to any other specialty. If we were to add the genital and venereal diseases, these soon would overshadow the urinary diseases, as they inevitably do. Our efforts then, would suffer the limitation of being cut off from further work in conjunction with other specialists and general practitioners.

Another objection advanced against amalgamation is in the incidental obligatory membership in the American Medical Association. While it is perfectly true that nearly all our members are adherents of that great association, there still are some who will not under any circumstances join it. Among these are men we would be loath to lose, both for professional and personal reasons.

Finally, the fact that we are a strong body now, have an excellent independent JOURNAL, and occupy a recognized corporate existence in the profession is an argument that is daily gathering weight.

It is hoped that the preceding is a fair, impartial presentation of both aspects of the question.

My own views at first were colored by the belief that we would inevitably become a section of the American Medical Association.

Closer consideration of the subject, however, and conference with several of your executive committee, have forced the conviction that as an independent body we can better carry out our purposes. Even if no change in our plans and methods were involved in the proposed amalgamation, it would necessarily compel participation in the immense business matters of the great body. This would take from us time and energy that could be devoted, more effectively, to urology.

Deference to the American Medical Association is shown by holding our annual meetings on the day before and on the first day of that great organization's meeting. The latter's scientific work begins only on the second day of its annual meeting, when we have already adjourned and are free to profit by the work of the men who represent the professon at large. It is my belief that we can best progress by continuing independently, as we successfully have in the past.

And now, gentlemen, permit me to consume a few minutes of your time with a purely personal matter.

A year ago you chose to confer the highest honor in your gift upon me, who in no manner merited the distinction. You made me the successor of Ramôn Guiteras and William N. Wishard, both eminent men in our specialty, both endowed with the intelligence and education fitting them for preëminent posts.

The only explanation for your action seemed to me to be a desire to reward my preliminary efforts as a founder of this association and my two years' work as its secretary.

Since my election as presiding officer, you have upheld and encouraged, coöperated with and aided me, so that the work done by my eminent predecessors has been advanced. It would be false modesty to deny this fact. The records show it. This was your work, gentlemen, not mine.

The pinnacle of honor upon which you have placed me is felt to be the greatest glory an earnest, albeit obscure worker can attain. I shall cherish gratitude through the rest of life for your having elected me, for your having so nobly sustained this administration.

I return to your keeping the American Urological Association entrusted to me a year ago. It would be an evasion of the truth to say that it is not a better or a larger body than it then was. Yours is the credit therefor.

At this meeting you will elect my successor. Doubtless he will be chosen for his merits, as were my predecessors. Let me ask that you give him that cordial support with which you favored me. Then will our association continue to progress, with those tremendous strides it is bound to make.

When the time comes for comparison between his work and my efforts, say for me that I did my best.

Remember that the language at my command is inadequate to express my gratitude to each and every member of the American Urological Association.

Gentlemen, I declare the Fifth Annual Meeting of the American Urological Association open for the transaction of such business as may legitimately come before it.

171 West Seventy-first Street.

PRESIDENT'S INAUGURAL ADDRESS TO THE NEW ENGLAND UROLOGICAL SOCIETY.[1]

OLIVER C. SMITH, M. D., Hartford, Conn.

Members of the New England Urological Association:

At this, the first scientific meeting of this association, it might be well for us to consider briefly the origin and growth of the parent society, The American Urological Association; to review the field of work which this society is to encompass, and to consider the ways and means by which we can accomplish the greatest benefits to the general profession, to the public, and to ourselves.

Most of you are familiar with the short sketch of the origin and growth of The American Urological Association, by its founder and first president, Dr. Ramón Guiteras of New York. This appeared in the June number of THE AMERICAN JOURNAL OF UROLOGY, 1905. In this sketch he tells us that the New York Genito-urinary Society was founded five years before, and consisted chiefly of the members of Dr. Guiteras' clinic. Shortly after its formation, those who had formerly served as assistants in the clinic were invited to join, as well as the fresh recruits. This society held meetings in one another's houses until January, 1902, when, stimulated by the success of the French Urological Association, it was decided to increase the scope of its work, and to adopt the name of The American Urological Association. The first officers were: Dr. Ramón Guiteras, president; Dr. William K. Otis, vice-president; Dr. Ferd. C. Valentine, secretary; and Dr. John Vander Poehl, treasurer. It was the privilege of your chairman to attend the first annual meeting, which was held in Saratoga, June, 1902, at which time he became a member. Although the attendance was not large, from the character of the papers and discussions it was apparent that the members were earnest, and that there was a clear and wide field of usefulness for The American Urological Association.

The second annual meeting was held at New Orleans, with

[1] Meeting May 3, 1906.

an attendance of fifty members, and the third annual meeting at Atlantic City, when it was found that the membership had reached two hundred. At this time, the Chicago Urological Society was incorporated as a branch in the The American Urological Association.

The fourth annual meeting was held at Portland, July, 1905. It must be admitted that this meeting did not quite meet the expectations of the members, although several valuable papers were read. The lack of attendance, however, cannot be attributed to any failure of interest in the subject of urology, or lack of subjects, but rather to the fact that the vast majority of visitors to the Portland meeting were bent upon taking in all the sights and scenes which a country entirely new to most of us afforded.

At the coming meeting in Boston next June, this condition will not exist, as a large number of the members will be familiar with Boston and its surroundings, and will be disposed to devote more of their time to scientific work.

The association is now composed of four branches or departments: that of New York, the Pacific Coast, Chicago and New England.

The early work of the New York Genito-urinary Society was confined to diseases of the genito-urinary tract in the male, but with the broadening out of this society into The American Urological Association, its scope of work was likewise widened, and in the words of Dr. Guiteras: "The Urological Association cut out most of the genital part of genito-urinary diseases. Veneral diseases, with the exception of urethral infections and lesions, were debarred, and genital diseases, excepting such as have an influence over the urinary organs, were not considered. On the other hand, diseases of the urinary tract in women were considered equally as important as those of men." By this expansion of the field of its work, many others than those strictly specializing in genito-urinary diseases were induced to join, such as gynecologists, pathologists, general practitioners and general surgeons. Dr. Guiteras, in the paper above referred to, is careful to state, "That The American Urological Association is not a rival of the American Genito-urinary Association, and that papers on all genital diseases, other than those of the prostate, and on all veneral diseases, excepting those of the urethra, were not accepted."

We are all familiar with the organ of this association—THE AMERICAN JOURNAL OF UROLOGY—which had for its first editor, Dr. Henry G. Spooner of New York, and which is now in the competent hands of Dr. Charles Greene Cumston of Boston.

Dr. Guiteras urges members to favor the JOURNAL with their papers which are read at the association's meetings. This seems to me eminently proper, and now with the expansion of the association into its four divisions, with increased numbers of meetings, the number of papers which shall be available by the JOURNAL will be largely augumented.

It might be well for each branch to have a committee on publication, to which all papers read at the branch meetings should be referred, and such published in the JOURNAL as the committee and the editor select. No one interested in this line of work can afford to be without THE AMERICAN JOURNAL OF UROLOGY.

The objects of this society, as of every scientific society, are the dissemination of knowledge by communications, discussions and publications; the increase of knowledge of each by association with one another, by the exchange of ideas, and by the work and research which we must accomplish to be of value to the society, and to do our duty to ourselves and each other. It will at once be seen that the range of subjects included within the legitimate province of this association is very wide, embracing as it does the various diseases of the kidney, ureter, bladder and urethra, and in all of these organs and tissues we have acute and chronic infections, neoplasms, congenital abnormalities, traumatic lesions and calculous deposits.

When we appreciate that much of the pathology of the urinary tract has been rewritten during the past two decades, that many procedures, both diagnostic and operative, are even now in their primitive states, and that many important and life-saving operations upon these organs, although some of them were accomplished many years ago (for instance—lumbar nephrectomy by Gustave Simon of Heidleberg in 1869, nephrolithotomy first performed by Henry Morris in 1880, nephropexy by Hahn of Berlin in 1881, suprapubic prostatectomy accomplished by Belfield and McGill in 1885), have become accepted as orthodox surgical procedures only at a comparatively recent date. The causes for the relatively slow development of this branch of sur-

gery may be found in the fact that until within the recent past, our methods of diagnosis, except to extremely few, have been vague and uncertain, and that too often the operator failed to find what he had anticipated, and although the greater part of this work has developed since the days of asepsis, the earlier work carried a high mortality, and was attempted by comparatively few, either in this country or abroad.

We must admit that until a few years ago, the treatment of acute infections of the urethra was not considered an enviable branch of the profession. In our country, at least, it was rather relegated to men who had failed to succeed in more attractive fields.

With the accomplishment of urinary segregation by Tuchmann, and the vesical illumination by Nitze in 1876, the science and art of urology took fresh impetus, until now there has clearly dawned an era of hitherto unknown scientific activity and success in the field about which the interest of this and kindred societies centers.

We must consider how best to bring before the attention of the general profession the importance of this subject, its advancement, its opportunities and its limitations. We must remember that the general practitioner is usually the first to be consulted in this as well as in other classes of diseases. In so much as we can increase his knowledge of the importance of early diagnosis, early quarantine, and proper and prompt action where it is possible, will we benefit the urologically afflicted. It is certainly wisest then, that we include the general surgeon and the general practitioner and the gynecologist in our membership.

It is fortunate, too, that the progenitors of this society decided upon a periodical publication, rather than upon an annual volume of proceedings for our communications and discussions.

It is to be hoped that our JOURNAL will enjoy the widest of exchanges, and that abstracts of important articles may have extensive circulation.

To be of the greatest use to one another, and to our association, we must be honest with ourselves, for no one knows his capabilities and limitations better than he himself. It is our duty to put forward, in the most lucid and attractive style, that which we have learned best, even though we confine ourselves to a narrow

field, rather than to attempt to cover the entire range, and in so doing largely make use of what others have become more expert in than we. In other words, if each member gives to the other member, unstintedly, the best that is in him, the entire body approximates the strength of that which excels in each.

It is the fervent hope of your chairman that this association may shine in unselfish devotion to the interests of this important branch of the profession.

44 High Street.

THE SEQUELAE OF PROSTATECTOMY.[1]

By Richard F. O'Neil, M. D., Boston, Mass.

IN taking up the subject of the sequelae of prostatectomy, one finds that it is very difficult to treat this question fully without going much more deeply into indications, methods, etc., than the title of this paper suggests or the space permits. I have endeavored to confine myself to the untoward results occuring at the time of, or immediately after, the operation, and due to it, and to the conditions present during the first few months following. Even then I find myself confronted with the death rate on one hand and the end results on the other, both of which are sometimes identical with the sequelae.

I wish to enumerate and describe briefly the various complications, to form an estimate of their frequency, their cause, and if possible, their prevention. These complications are numerous, all of the following having been reported. They may be roughly divided into two groups, those of a general type, and those more or less local. The first, including shock, haemorrhage, sepsis, kidney insufficiency, pulmonary congestion, cardiac failure and marked nervous symptoms. All of these of course may follow any surgical procedure, but are especially to be feared and guarded against in the class of patients whose organs are very apt to be more or less damaged by age or disease.

In the second class may be put peritonitis, urinary infiltration

[1] Read at the first meeting of the N. E. Urological Society, Boston, May 3. 1906.

resulting in pocketing, abscess and sinus formation, urethro-rectal or vesico-rectal fistulae, perineal and suprapubic fistulae, epididymitis, orchitis, sexual impotence, cystitis, calculi, incontinence, frequency, residual urine and retention, stricture, and tortuous urethra resulting from cicatricial contraction, rendering instrumentation difficult. Of this truly formidable list, fortunately a number of these conditions are rare when the operation has been well advised and carried out. Still they have all occurred and the surgeon should have them in mind and guard against them.

Before taking up the question of which of these sequelae are more prone to follow one or the other method of operation, it might be as well to consider briefly those affecting both, and what can be done to prevent them.

There are few, if any, cases calling for better judgment upon the part of the operator than those of prostatic hypertrophy. He must not only select the proper case, time and method for operation, but estimate the patient's resisting power, determined by the condition of his heart and kidneys. He must be dextrous and perform a complete operation, as I believe many of the sequelae and poor end results are due to a partial or mutilating operation, or to some error or omission in technic or after care. Mistakes in diagnosis also lead to disaster, for example case of tabes and cancer.

Assuming these requirements to be fulfilled, what can be done in general to prevent unfortunate sequelae? Before the operation the patient should be gotten into as good condition as possible, especially as regards his elimination, and should be encouraged to drink freely of water. Strychnia and other cardiac tonics and diuretics are indicated to forestall shock and kidney insufficiency. At the time of operation, prevention of loss of body heat, the use of stimulants and salt solution, enema or infusion are the measures to be employed for the same purpose. Shock may be a very considerable element in these cases, as the nerve supply to the prostate is extensive. Post-operative anuria and uremia are to be met in the usual way. The patient should be kept quiet before operation, but not put to bed until just before and should be made to leave his bed just as soon after operation as he is strong enough to sit up. With regard to prevention of sepsis, in addition to the ordinary surgical methods, some urinary antiseptic, the best of which is hexamethylenetetramine in the form of cystogen or

urotropin tablets should be given and if moderate cystitis is present the bladder should be irrigated with caution at frequent intervals. If there is a bad septic bladder, a preliminary cystotomy should be performed, the prostatectomy being done at a later and safer date. Hemorrhage does not seem to be as a rule a serious feature of the operation, it generally being readily controlled by irrigation with hot saline or adrenalin solution, secondary packing being only occasionally required. It would seem that according to most authentic sources, serious bleeding is generally found in those cases where an incomplete operation has been done. Cystitis and the formation of calculi occasionally follow the operation, a striking case in point being reported by Lilienthal, where severe cystitis followed a suprapubic operation; at a second operation several stones were found, their nuclei being bits of tissue. This case was not irrigated after operation and shows the importance of this procedure in the after treatment.

According to Guiteras, prostatics are particularly liable to more or less marked neurasthenia.

In taking up some of the more strictly local complications peritonitis has followed both methods of operating, but is infrequent. In the suprapubic incision there is danger of opening the peritoneum, particularly when a previous operation has been performed. The writer has seen this happen several times with no ill result. It has been torn in the perineal operation.

Injuries to the rectum with resulting vesico-rectal or urethro-rectal fistulae occur most frequently when there has been a previous inflammatory condition, such as prostatic abscess which may have resulted in firm adhesion of the gland to the bowel. Injury to the rectum rarely occurs in the supra-pubic operation. I have found mention of but one case in a large series. Such fistulae are very troublesome and difficult to repair.

Injury to the vesical neck, urethra, and other structures in the perineum give rise to a number of conditions depending more or less upon the extent of such injury, one of the immediate results being faulty drainage which may allow infiltration of urine with subsequent abscess and sinus formation. Epididymitis and orchitis are not of infrequent occurrence and are due to infection from the posterior urethra, either from injury or instrumentation. Among the later results are the conditions due to cicatricial contraction, *e. g.*, stricture and tortuous urethra, rendering instrumen-

tation difficult. Permanent incontinence may also result from this cause. Temporary incontinence may be due to long stretching of the vesical sphincter. Sexual impotence is another one of the later sequelae and is said to be due to injury of the ejaculatory ducts. By the technic of Young these structures are protected. In a number of cases this point is of secondary importance, the object being bladder drainage and not the preservation of a doubtful sexual power. According to statistics all of these conditions occur much more frequently after the perineal operation than after the suprapubic.

Frequency and urgency of urination are common sequelae of prostatectomy; often they are temporary and due to conditions at the vesical neck, as a natural result of the operation. That a moderate frequency, say every three hours in the day, and arising one to three times at night, persists in a number of cases, is not surprising and has nothing to do with the operation, but results from permanent changes that have taken place in the bladder itself, such as hypertrophy of the bladder membrane, sacculation and trabeculation, and changes in the capacity of the viscus due to the effects of long continued back pressure and recurrent attacks of cystitis, or both. To expect a prostatectomy, however complete and well it may have been done, to relieve symptoms due to such pathological changes is asking too much. It does not seem to the writer that the choice of operation would have any particular bearing in such cases.

Frequency, urgency, scalding, and residual urine occur in a certain number of cases, due probably to some avoidable point in technique or error in judgment. Retention may be due to an atonic bladder or to some undiagnosed lesion of the cord.

As we have seen, both methods of prostatectomy are liable to certain sequelae in common, not due to the route selected but to the condition of the patient's kidneys, bladder, etc. Each method has in addition its particular train of complications. With regard to the perineal operation, the classification given by Proust seems to be the most natural. First, wounds of the rectum with their resulting fistulae; second, urinary troubles, frequency, incontinence, residual fistulae and cicatricial contraction; third, injury to the sexual apparatus, orchitis, and sexual impotence. These points have been already spoken of more in detail.

The suprapubic route is remarkably free from any of the above on account of not invading the perineum or opening the urethra below. Injury to the prostatic urethra is one of the sequelae of the operation, but even here the removal of the whole or of a large portion of it does not seem to affect the result, as this has been done a number of times. Suprapubic fistula and infection of the prevesical space must be very uncommon and should not occur with proper treatment of the suprapubic wound. Adhesion of the bladder to the abdominal wall is said to have given rise to some urinary discomfort from traction upon the organ. This is probably of unusual occurrence.

With regard to ascertaining the frequency of sequelae, the writer has gone over with great care the detailed reports of 115 cases of perineal, and 93 cases of suprapubic operation given by Proust. Of the perineal operations, 8 patients died, of the remaining 107, 55 cases had some postoperative condition, often several, orchitis occurring 14 times, fistulae 14 times, of which 5 were temporary, residual 20 times. In 10 cases there was marked frequency. In 30 other cases, only 8 of which are included in the 55 because of other conditions, a moderate amount of frequency was present, that is from two to four times at night and every three hours in the day.

The beginning of micturition was give in 66 cases, longest 70 days after operation, shortest 5 days, average 26 days.

Of the 93 suprapubic cases 11 died. Of the remaining 82, 12 had sequelae (this includes 2 cases of shock and 1 of hemorrhage), 4 suffered from frequency, 2 from slight residual, 1 abscess, 2 orchitis, one of which was in a fatal case.

Micturition began on an average 17 days after operation, longest time being 45 days after, the shortest 3 days.

That certain of these cases suffered from moderate frequency the writer has no doubt, but by comparing the two series of cases, we may say that the perineal route is much the more liable to troublesome sequelae.

379 Beacon Street.

Note—It is with regret that the Journal cannot publish Dr. Benjamin Tenney's excellent paper on "The Mortality after Prostatectomy," this being due to the fact that its author had offered it to another periodical some time before he decided to read it at the meeting of the Society.—The Editor.

THE RESULTS OF PROSTATECTOMY.

HUGH CABOT, M. D., Boston, Mass.

TEN years ago the results of surgical treatment of hypertrophy of the prostate were far from being satisfactory, but the years 1898 to 1904 showed tremendous activity in this field, and there is perhaps no department of surgery which has, during that time, attracted more attention. To its problems were brought some of the most brilliant minds of the surgical world in the attempt to reduce the then most discouraging mortality, and give us an operation which we could consientiously recommend. The results of this work are everywhere to be seen and the advancement of our knowledge has equaled any reasonable prediction. Collections of cases so large as to command attention, show a satisfactory decrease in the mortality. The present radical operations, both suprapubic and perineal, show, in the hands of experienced operators, as favorable a death rate as is to be found in any capital operation on patients of a like age.

The right of prostatectomy to be considered one of the great life-saving operations of the day must be admitted, and grave discussions of the propriety of classing it as a curative operation are no longer in order. We have come far, but much yet remains to be done before this branch of surgery can be regarded as abreast of the times. But the admission of the position which prostatectomy has made for itself does not absolve us from the necessity of considering with the utmost care what it may properly be expected to accomplish, and of avoiding extravagant claims which we cannot fulfill. Unfortunately, the eagerness to show the reasonable safety of the operation has led to a neglect of careful tabulation of results other than the fact of recovery, and while we can count by hundreds the reported cases showing mortality, we must count by tens the cases in which we can honestly say that we know the functional result one year or more after operation.

It is well to remember that the operation of prostatectomy is not to be classed with that of appendectomy or hysterectomy, for

in these instances we are dealing with organs which are isolated, or at least working largely independently. In these operations, to know the mortality is to know the result, but with prostatectomy the case is far otherwise. The prostate is an organ at once urinary and sexual, and its position is such that its removal without damage to neighboring organs is practically impossible, and the return of these organs to their previous condition is a myth. These are self-evident facts and their recital would be unpardonable, were it not for the fact that there has been and still is a dangerous tendency to class and speak of prostatectomy with other major operations such as those above mentioned, with which it has nothing in common.

The goal set for the surgical treatment is to supersede the catheter and enable us to offer to our patients something better than the tyranny of the catheter life, but this result will be obtained not by making light of our failures, not by pretending that a discussion of mortality is a discussion of results, not by the misleading statement that all the patients who recovered from operaton " did well," but by a full and free discussion of our failures and a diligent search for the cause of these failures. It cannot be denied that many patients have been made worse, and no long service in the Out-Patient departments of any of our large hospitals is necessary in order to see men whose condition is miserable and whom we are powerless, or nearly powerless, to relieve. These, gentlemen, are the interesting cases and it is by the study of this, the shady side of the picture, that we shall assist most in placing the operation upon a sound footing.

At the meeting of the American Urological Association held in Portland last July, Dr. Whiteside read a paper on the Results of Perineal Prostatectomy, in which he drew a most discouraging picture of the present conditions. It was a careful, conscientious, honest piece of work, and a step in the direction of full reporting and fearless criticism of end results; but either the work of the last ten years has been sterile and an extraordinary number of ordinarily sane men have been egregiously deceived by their senses, or Dr. Whiteside is wrong when he concludes that " the average is not much better than that given by Dr. Belfield in Morrow's textbook twelve years ago." I fully beleve that he is wrong, that a somewhat different presentation of the facts will justify the con-

clusion, that the results to-day are an immense improvement on those presented by Dr. Belfield.

Keenly as I realize the weakness of statistics, and though entirely willing to admit that many unsound propositions have been bolstered up by their use, I still regard them as more likely to be accurate than our impressions, for *they* are often but the reflex expression of our hopes.

In collecting his cases Dr. Whiteside has given much weight to very small groups and has used only one large group. Thus, in series " A " he presents cases from nine different surgeons, with an average of a trifle over four cases each. I doubt the soundness of conclusions drawn from so few cases, especially as it does not by itself show that any of the surgeons had a very wide experience, and gives a very unfair representation of such an experienced surgeon as Dr. Paul Thorndike, who, though we know him to have had excellent results, is represented in this table by one case, and that a case of cancer. Series " B," that of Dr. Murphy, is an excellent one, but does not deal with the conditions as they stand to-day, and the large statistics of Dr. Young and Dr. Goodfellow could not be considered because they did not show end results.

The operation of prostatectomy in its present state of development is not one in which the surgeon can expect good results without considerable experience, for it requires not only operative skill, but a full and comprehensive knowledge of the pathology of the urinary tract. Moreover, it requires a careful and skillful study of each case. I believe that this society will concur with me in the belief that the operation itself is but a small part of the treatment of each case, and that much special knowledge is necessary to get good results.

In the collection of cases which I have to present, I have taken cases only of surgeons of experience in this work, and who report not less than fourteen cases, showing the results one year or more after operation. The only exception to this is the cases from the Massachusetts General Hospital, and I have thought it only proper to quote these cases, showing a great improvement in the results of the surgeons who so kindly allowed me to publish their results two years ago. I have considered as cured those cases which comply with Caspar's requirement, in that they re-

main without subjective symptoms and show no considerable amount of residual urine. The number of such cases is necessarily small because true end results are hard to obtain, but such as they are they cannot but be suggestive. They show the results of the perineal operation, as I have been unable to find reports of a sufficient number of suprapubic operations to justify any conclusion.

CASES WITH RESULTS KNOWN.

Legueu [1]	14 cases	7 cures
Heresco [2]	16 cases	8 cures
Rivière [3]	9 cases	5 cures
Loumeau [4]	28 cases	15 cures
Escat [5]	337 cases	287 cures
Hartmann [6]	20 cases	11 cures
Albarran [7]	57 cases	44 cures
M. G. H. (year '04)	14 cases	11 cures
	495	388=78%

This is certainly a good showing and after making every allowance for the tendency of man to report his successes, we must admit that the outlook is less discouraging than we have been led to suppose.

It is further interesting to note the higher percentage of good results in the cases of complete retention as compared with those of incomplete retention. The following table shows this comparison in all the cases which I have been able to collect from the same surgeons whose cases are reported above. The number is small, but worth recording.

	COMPLETE RETENTION.			INCOMPLETE RETENTION.		
	No.	Cured	%	No.	Cured	%
Hartmann	13	9	69	7	2	28
Albarran	34	32	91	23	12	52
Legueu	6	5	83	8	2	25
M. G. H.	8	6	75	4	1	25
	61	52	85%	42	17	40%

The explanation of the difference between the results here shown and those obtained by Dr. Whiteside, is to be found in the

experience of the operators. A famous genito-urinary surgeon has well said that when a patient asks him what is the chance of cure by operation, he always reples: "Who is to operate upon you?" In the field of general surgery many bungling operations do not reflect discredit on the operator, because recovery takes place in spite of, rather than on account of the operation, but after a poorly executed operation upon the prostate, retribution is swift and sure, and patients who have been left with a partial retention, an incontinence, or a fistula are not famous for their consideration of the feelings of their surgeon. A mistake in diagnosis either of the condition of the prostate or of other parts of the urinary tract, an unwise selection of the best route for operation, or unskilled after treatment, may alike spell failure. The operators of right judgment are getting far better results than their less experienced brethren, and it seems logical to expect that this will be the case.

In conclusion, I believe that we are justified in assuming:

(1) That the mortality bears little relation to the functional results, and we should avoid confusing good mortality statistics with cures.

(2) That of properly selected cases in the hands of competent surgeons, about three-fourths of those who survive the operation will be cured.

(3) That of the remaining one-fourth, many are very greatly relieved by the operation, and

(4) That as experience with the operative treatment becomes more general, the results obtained will be better.

[1] *Ann. d. Mal. d. Org. Gen-Urin.* 1904, p. 1715.
[2] *Ann. d. Mal. d. Org. Gen-Urin.* 1903, p. 1668.
[3] *Arch. prov. de Chir.* Oct., 1903.
[4] *Ann. d. Mal. d. Org. Gen-Urin.* 1905, p. 1871.
[5] *Ann. d. Mal. d. Org. Gen-Urin.* 1904, p. 1635.
[6] *Ann. d. Mal. d. Org. Gen-Urin.* 1905, p. 694.
[7] *Ann. d. Mal. d. Org. Gen-Urin.* 1904. p. 1716.

1 Marlboro Street.

REMARKS ON THE INDICATIONS, CONTRA-INDICATIONS AND MANAGEMENT OF PROSTATECTOMY.[1]

By Charles Greene Cumston, M.D., Boston, Mass.

FROM the recent papers published by Albarran, Bako, Czerny, Fergusson, Freudenberg, Goodfellow, Gundersen, Hartmann, van Hook, Horwitz, Legueu, Lichtenstern, Longfellow, MacGowan, Marwedel, Murphy, Miculicz, Nicolich, Parker, Pauchet, Pilcher, Pousson, Rafin, Riedel, Rivière, Sheen, Squier, Verhoogen, Young, and Zuckerkandl, a total of 755 cases of perineal prostatectomy have been reported, and of these 49 resulted in death, making a mortality of 6.47%. If this mortality is compared with that of the year 1902, which was reported by Burkhart at 12.1%, it at once becomes evident that there has been considerable improvement made in the operation. As regards the functional results, they are almost invariably reported as good, so that it may be fairly assumed that of those patients who survived the operation, nearly all have recovered the power of spontaneous micturition.

Up to the present, I have performed 19 perineal prostatectomies without any mortality, but in one case a perineal fistula resulted. The patient was a man of some eighty years of age, and fourteen months after the operation he was still voiding his urine per perineum, this being the last time that his physician informed me as to his condition.

In these rambling remarks, I would like to refer to a few points relative to the feasibility of performing either suprapubic or perineal prostatectomy, but I would say at once that I shall not refer to the question of malignant disease of the gland, as I have already gone somewhat into detail relative to this pathologic process in a paper which will soon be published in the Birmingham (England) *Medical Review*. There is one point in connection with enlarged prostates in young men, that is to say from twenty-five to thirty-five years of age, to which I wish to refer, because I

[1] Read at the first meeting of the N. E. Urological Society, Boston, May 3, 1906.

believe it is not generally considered, and that is that when symptoms of this condition exist at the above time of life, syphilis may be suspected, and a properly conducted specific treatment has in several instances resulted in a cure, the gland returning to its normal size.

In certain diseases, such as diabetes, cardiac or pulmonary complications (conditions which naturally are always ascertained before proposing surgical interference), any attempt at a radical cure offers considerable risk and a minimum chance of success, and I feel compelled to admit that prostatectomy is also absolutely contra-indicated in certain septic complications arising in the urogenital system. Thus, when a prostatic or periprostatic abscess develops in a hypertrophied gland, prostatectomy in these infected tissues is dangerous, and from the cases published, I think it is safe to assume that it has never been crowned by success. Here, even catheterization done four or five times in twenty-four hours, with irrigation and minute care, is not attended with any results of a favorable nature, the urine remains filthy and the temperature is up in spite of the administration of urotropin, quinine and a milk diet. If prostatectomy is attempted in these cases, the temperature will remain up after the operation, and serious general phenomena still are present in spite of the disappearance of the suffering, and death frequently occurs within a few days after the operation.

When a serous urinary infection has become established in cases where catheterization has been the means of keeping up the phenomena, or has been their direct etiological factor, suprapubic cystostomy will conjure the immediate danger. In spite of the ease with which the catheter may be introduced into the bladder, it is only by the above mentioned palliative operation that urinary cachexia will be avoided. There are other cases where cystostomy is of value, such, for example, as chronic retention with distension —where no sign of infection is present, there is an absence of temperature, but urinary poisoning nevertheless exists, it being indicated by digestive disturbances and so forth.

In these patients who are uremic and frequently have emptied their bladders by overflow for a considerable length of time, this operation permits the bladder to recover from its congestion and does away with the unfortunate occurrence of uremia

coming on a few hours after an aseptic catheterization has been done. It is in just these cases that an early suprapubic cystostomy has saved numerous patients by conjuring the evolution of the accidents, or at any rate delaying them.

In considering the proper radical operation to select it appears to me that perineal prostatectomy is by far the surest manner of placing the bladder at rest, thus doing away with the hyperemia of the entire urinary tract, stopping the pain, bringing down the temperature and helping the kidneys. Cases are now no longer wanting in which prostatectomy has been followed by most favorable and satisfactory results in chronic retention, severe pain or an impossibility to pass the catheter, all conditions where it is most legitimate to operate. In a large number of these cases the faculty of spontaneously emptying the bladder returns, micturition is easy and the bladder may empty itself almost completely, while in the less brilliant instances some residual urine still remains, but the urine becomes clear and the cystitis disappears.

There are, however, certain precautions which should be taken before the operation is done. When dealing with a complete or nearly complete retention, even if the urine is not foul, the catheter should be used for a certain time, being passed several times a day or allowed to remain à demeure and the bladder carefully irrigated. By these means the organ is kept empty, its contractility is preserved to a certain extent, while ascending dilatation of the ureters and renal pelves is prevented. Vesical contractility is of great importance as far as the results of the operation are concerned, but, unfortunately, one can never be sure of its exact condition, because in some cases where the power has been thought to be absolutely lost, it returns completely after operation, while in others it remains abolished. When catheterization is regularly done before a radical operation is undertaken, the contractile power of the bladder will be greatly aided, so that after the operation very excellent results may be obtained as far as evacuation of the viscus is concerned in cases where complete retention has existed. Bladder contraction, which in these cases may have been absent for a long time, will return and patients who have presented complete retention for a variable length of time will be able to completely empty their bladders and are no longer obliged to resort to the catheter.

The question arises whether or not there are cases where a very early operation is to be advised in which prostatic retention exists and where the very best results may be obtained—in other words, where operative interference becomes the treatment of choice. I believe that this indication is to be found in young prostatics—that is to say, in men from fifty-five to sixty years of age—who are in good health, easily catheterized, where there is hardly any residual urine and in whom the urine is normal, or only momentarily cloudy.

In these cases I believe that prostatectomy should be done in order to do away with a future catheter life, more particularly when the social condition of the patient prevents regular and aseptic catheterization being done. When prostatectomy is done early under the above conditions, and in patients who are still robust, very remarkable results may be obtained, both from the operative and functional view points.

When an operation is done early the contractility of the bladder is completely preserved, and these younger subjects, operated on before vesical distension and considerable residual urine occur, rapidly recuperate, while their bladders are easily and completely emptied and nocturnal micturition disappears completely or almost so.

I would say that I always make it a point to inform the patient, whatever be his age, that generic power may disappear or be weakened, but usually the number of those who desire to retain this function is small, and in comparing the mental quiet obtained by operation to the misery that they are undergoing from their condition, most will, I believe, willingly accept the loss of what little sexual power they may still retain.

In assuming the defense of prostatectomy, I would point out that the first objection usually made against an interference of the importance of this one is that the opponents of the operation say that patients presenting themselves for operation are already infected and weakened, and that one only hastens their death by submitting them to a surgical traumatism, which is in reality considerable, followed by horizontal rest in bed for a considerable length of time.

Now, in the first place, allow me to say in parenthesis that, as I have already said, I believe the operation especially good in

young subjects and not in old prostatics, and, placing ourselves in the worst condition possible, is the poor general condition a contra-indication to the operation? I would say yes, if one does not wish to darken his statistics, but would reply no if we are considering clinical facts. It goes without saying that the statistics of prostatectomy have been rendered sombre from the fact that many interferences have been undertaken on patients who were nearly in the jaws of death, but beside these dying subjects that the operation was unable to save, there are others, none the less compromised vitally, who owe their life to operative interference. Upon this point the partisans of cystostomy will not fail to say that the successful outcome is due to the rest given to the bladder, and drainage.

But now if the prostate is removed at the same time as cystostomy, a thing easily accomplished in a few minutes, what exaggerates the surgical traumatism? Hemorrhage? No, because it is practically insignificant and even if there is some, it can always be controlled and has seldom been the cause of death.

In very old subjects anuria has been known to occur after the operation, but this complication is nearly always transitory. Vignard has collected six cases due to Robson, Kümmel, MacGill and Schmidt, where the general condition was very serious, but the operation not only did not result in death, but allowed the patients to recover their health.

When considering the question of prostatectomy, one should always recollect that the general condition may be favorably influenced by the rest given to the bladder from the drainage. As the retention ceases, the ureters are no longer dilated, the renal functions gradually return and there is no retention of septic products.

Can the value of prostatectomy be denied in cases where catheterization is difficult? It has been upheld by a number of eminent surgeons, that a careful and skillful catheterization will always overcome the prostatic obstacle, and they refuse to believe that difficulty in the passage of a catheter is in itself sufficient to justify radical procedures. American and English surgeons have upheld that to facilitate catheterization and to render it harmless in the future, is a decided advantage, greatly in favor of a radical procedure, and many, including Southam, Keyes, Wol-

sey, Fuller and Mansell-Moullin, have considered this as one of the principal indications for prostatectomy, and I am decidedly of the same opinion, because I believe that a well-conducted prostatectomy, performed in time, is far preferable to bad catheterization.

In reply to this the opponents will naturally say that the difficulties to catheterization are not always removed by prostatectomy, but this point needs no consideration, because it has been proven beyond a doubt that, although many other advantages have been refused in the case of the prostatectomy, this one has never been contested. The true difficulty is nearly always seated in the neighborhood of the vesical neck; a bar of prostatic tissue blocks the catheter, this being represented by the so-called median lobe, no matter what form of development it may have taken on, and it is of very rare occurrence that an hypertrophied lateral lobe has resulted in obstructive difficulties as serious as those accruing from an enlarged middle lobe. Now, this median lobe may always be removed sufficiently to allow easy catheterization.

The question can also be raised as to whether there is not more danger in performing prostatectomy than in giving the patient up to the chances of a difficult catheterization, but I would say that the time is no longer when the eminent Professor Guyon judiciously remarked upon the simplicity of catheterization in opposition to radical operation. False passages certainly count for something, they render the urethra impermeable just at the most critical moment, while hemorrhages of an alarming nature may arise on account of the prostatic congestion usually present. Then, again, infiltration of urine may arise, generally of a very septic nature, placing the patient in imminent danger of septicemic accidents. For all these reasons prostatectomy, from the fact that it is capable of rendering catheterization easy, is certainly an excellent procedure, even if only undertaken to obtain this result.

Prostatectomy is also indicated in cases of painful catheterization, and after it has been done, the passage of the instrument is painless. Other interferences, resorted to a few years ago, among others castration, obtained the same result.

Many prostatics have hemorrhage even when the passage of the catheter is an easy matter, the loss of blood being due either

to the usual congestion of the organ or to lesions accruing from a laborious catheterization, so that it is not infrequently a difficult matter to attribute the part played by each of these causes. Now, prostatectomy with drainage does away with all this; the obstacle is removed, the passage of the catheter becomes easy, the prostatic congestion disappears on account of the drainage, and thus both factors of the hemorrhage are at once suppressed by the operation.

I now come to the efficacy of prostatectomy where there is retention or formation of calculi in the bladder. Take a man of a certain age, gouty, with an enlarged middle lobe; he is seized with nephritic colic and the renal concretions come down the ureter into the bladder, where they are almost fatally retained on account of the obstacle presented by the enlarged prostate. This is an eventuality far from theoretical, but more frequently the calculus is developed directly in the bladder and this is by no means an infrequent complication of prostatic enlargement. Behind the prostatic obstacle residual urine is retained in which may develop all types of calculous formation. Now, it naturally follows that the only proper operation for the removal of the stones is by prostatectomy, which not only does away with these pathologic products, but their etiological factor, namely the prostate, as well.

Taking all things into consideration vesical retention of urine is the principal cause of suffering in prostatics, and I would here ask what prostatectomy can accomplish? I do not refer here to incomplete chronic retention, but to acute retention. Two points are to be considered. The first is where one is dealing with a patient going through his first attack of retention, and here I believe that radical interference should not be considered, because it has been demonstrated beyond a doubt that these cases when properly handled by catheterization may frequently go through life without a repetition of the retention, and unless the prostatic obstacle makes catheterization impossible, it should certainly be the method of choice.

Even if catheterization is impossible, prostatectomy should not be advised at once, nor simple cystostomy for that matter, and one should, in the first place, resort to suprapubic puncture. Numerous are the cases where the prostatic congestion is done

away with by the depletion of the bladder thus obtained and has rendered the urethra again permeable to the catheter, while spontaneous return of micturition takes place.

The question is entirely different, however, when acute retention takes place repeatedly at near intervals, and in this case and within certain limits, prostatectomy is indicated quite as distinctly as in cases of chronic retention.

In closing I would say that, personally, I feel that the important question at the present time to solve is that of the selection of cases which should undergo a radical operation and those where the interference can be delayed with all propriety, rather than of the technique to be selected.

871 Beacon Street.

SIGMATE* URETERAL OBSTRUCTION.[1]

A. Ernest Gallant, M. D., New York City.

In coming before this association, it is for the purpose of bringing to your notice the history of a patient suffering from an abdominal tumor, which from the history apparently originated in the pelvis, but proved to be a hydronephrotic kidney, induced by prolapse and the subsequent formation and agglutination of an "S"-shaped flexure of the ureter at its junction with the renal pelvis; with the course and result obtained by operation.

December 28, 1905. History furnished by Dr. L. H. Moss. Mrs. B., aet 41. One child fifteen years ago, instrumental, no complications. Appendicitis eight years ago, in bed two months; no operation; recovery complete. Well until two and one-half years ago, when she had an attack of pain in the left ovarian region, with nausea lasting twenty-four hours, compelling her to go to bed; all symptoms disappearing in twenty-four

* N. B.—Sigmate: Because to the ureter an "S" has been added, thereby causing it to resemble the early Greek and Latin ς or Σ with an appendix attached.

[1] Read before the annual meeting of the American Urological Association, Boston, June 4-5, 1906.

hours. These attacks have recurred at irregular intervals of two months, one month, and two weeks, ever since, always of the same

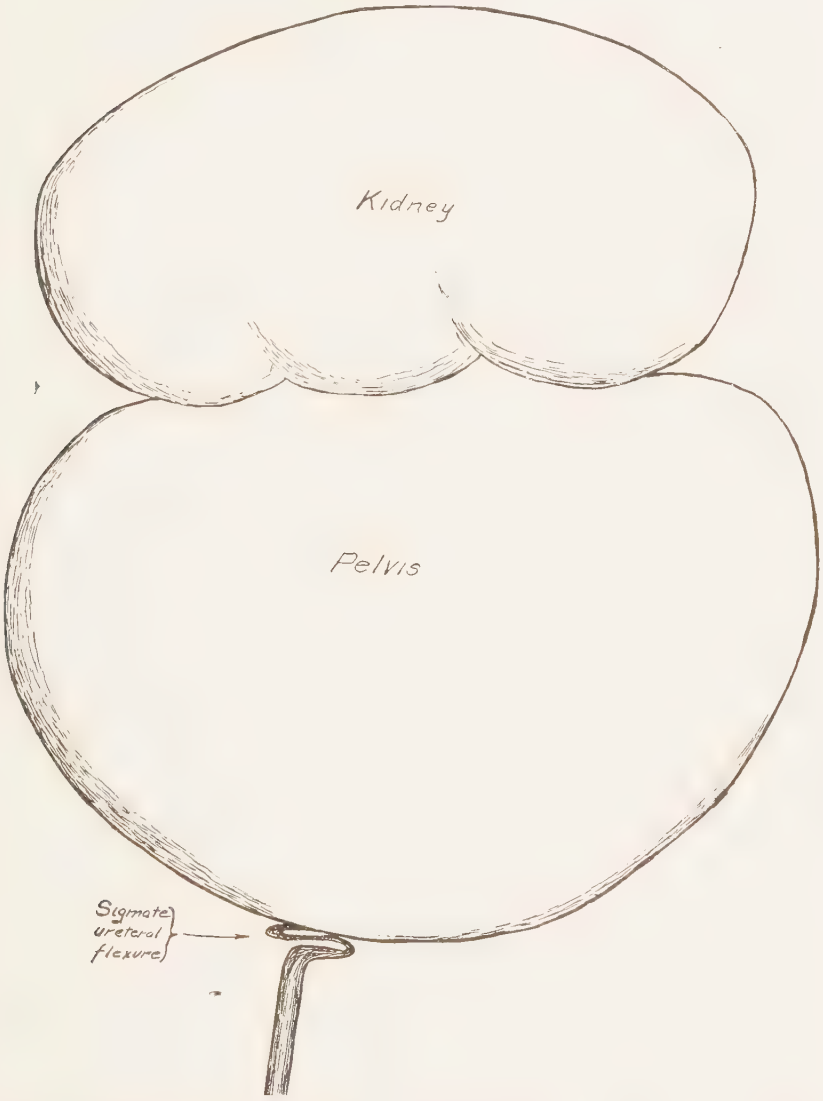

FIG. 1. HYDRONEPHROTIC KIDNEY AND PELVIS CAUSED BY SIGMATE URETERAL FLEXURE, BOUND DOWN BY INFLAMMATORY BANDS.

character, without any symptoms whatever in the interim. Vaginal examination in September last revealed a mass in the left side of the pelvis about the size of a lemon, tender and sensitive. Mens-

truation normal, and no apparent relation to the attacks; bowels regular. The last attack five weeks ago.

The present attack began forty-eight hours ago, with continuous pain and aching on the left side; pain, rigidity and fullness on abdominal palpation.

December 29, 1905. Abdominal palpation demonstrates a tumor lying alongside the umbilicus, somewhat larger than a grape-fruit, of irregular, yet smooth outline, non-fluctuant, moveable up and down, two inches above and two inches below the umbilicus. Splenic dullness normal. Uterus retroverted; left tube in the cul-de-sac. Appendix not palpable. Diagnosis: Prolapsed hydronephrotic kidney or possibly ovarian cyst.

Through a median incision the tumor was determined as of kidney origin, the uterus, ovary, and tube lifted up; the former site of the appendix was marked by a mass of fibrous material.

January 8, 1906. Ureteral catheters introduced into both kidneys and specimens secured. The right kidney discharged freely, the left very slowly.

Professor E. E. Smith's examination of the urines showed:

Left kidney, S. G. 1008. Pale amber color. Sediment: Mucus, small amount; epithelia, moderate number, squamous, round and tailed, common to the superficial and deeper layers of the upper urinary tract.

Right kidney, S. G. 1019½. Normal amber color. Sediment: Mucus, a trace; calcium oxalate crystals, small number; blood, few corpuscles; epithelia, moderate number, squamous and round, common to the superficial layers of the upper urinary tract.

Pathologist's conclusions: "The left kidney passes urine of a lower molecular concentration than the right, and hence is functionally less active, while the upper urinary tract associated with the left kidney exhibits epithelial exfoliation to a greater degree than the right."

January 17, 1906. An oblique incision, five inches long, from the tip of the twelfth rib, the muscles and nerves were displaced, and the kidney found densely adherent to the fatty capsule, now devoid of fat, was with difficulty freed, but during attempts

to deliver, the pelvis was ruptured at its junction with the middle border and about 20 ounces of urine escaped. Through a one-inch incision the finger was introduced and an unsuccessful attempt made to find the uretereal opening. On following it down, the ureter was discovered, bent upon itself, and securely fixed by dense adhesions at its junction with the pelvis. The bands were separated, and the ureter straightened, after which a bulbous probe, ¼-inch in diameter, was easily introduced into the ureter, down to the pelvic brim. The opening into the pelvis was closed by a double layer of black silk sutures. The tear at the kidney edge could not be closed by suture and was covered over by a piece of fatty tissue from the adjacent structures.

Owing to the thinned-out condition and large size of the kidney, it was deemed best to support that organ by gauze packing, rather than by sutures, a rolled gauze pad being placed below, in front, and behind the lower pole. The wound was partially closed by silk-worm sutures.

Urine drawn from the bladder at the close of the operation was bloody, showing that the left ureter was permeable throughout its length.

January 21. Four days later the side gauze drains were removed. By reference to the chart you will note that it was not until the seventh day that the quantity of urine really increased, when it ran up to 82 oz. and continued until the tenth day, when it reached 116 ounces.

February 1. The lower piece of gauze was removed and two days later urine escaped very freely from the wound.

February 4. The lower portion of the wound was repacked with gauze and two days later the bladder excretion was up to 64 oz. and continued at or above that point up to February 15.

On February 16, the patient was permitted to sit up, and the amount of urine passed from the bladder gradually decreased, with a corresponding increase of discharge from the wound. While sitting up a distinct prominence could be felt below the wound, which became painful; relieved by lying down and making pressure over it, causing considerable discharge, which during the first two weeks of April became purulent.

Between April 4th and 24th, the quantity of urine passed through the natural channel was markedly diminished, as low as

28 ounces per diem, and as the discharge of purulent urine through the loin continued with tumefaction and pain, it was deemed best to reopen the lumbar incision. This was done April 23. The kidney cortex was found thinned out, and the pelvis greatly dilated (nearly as large as at the original operation) and filled with pus.

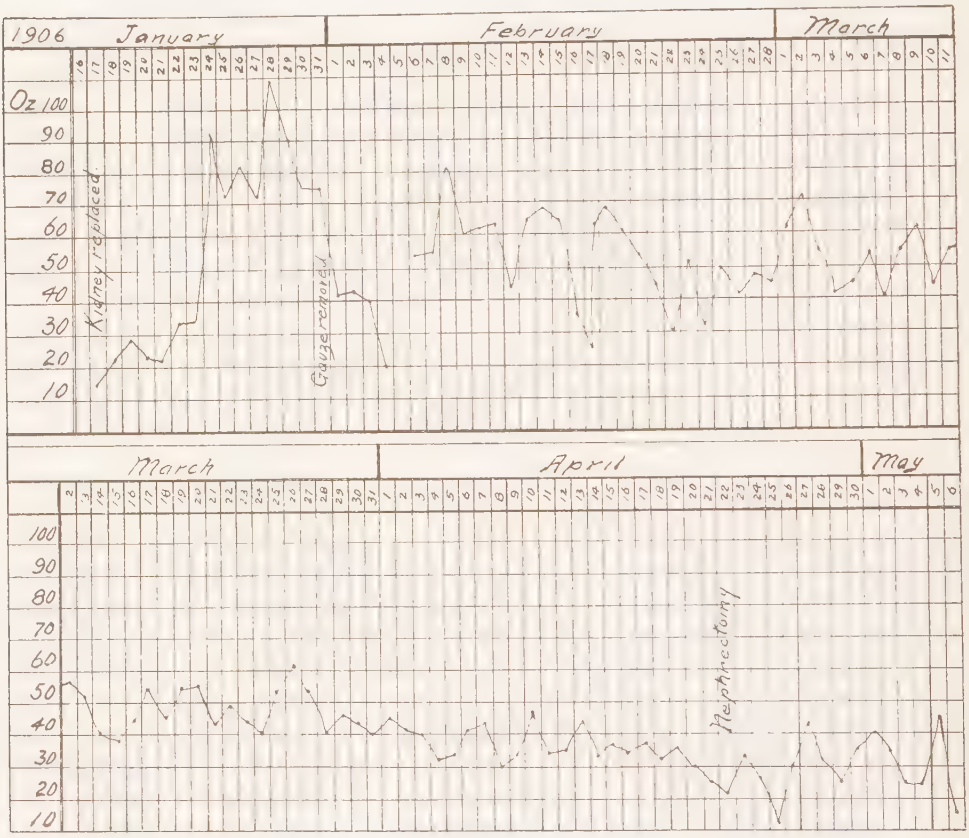

FIG. 2. MRS. B. CHART SHOWING DAILY EXCRETION OF URINE.

The kidney was easily freed from its bed. But the thickened pelvic sac could not be freed as a whole and part was not removed. The ureter was sutured into the lower angle of the wound with its mouth opening into the cellular tissue of the loin. A thick roll of gauze was placed in the cavity as a drain, and the lumbar structures sutured layer by layer, with cat-gut, the skin with silk-worm gut.

During the three days following the operation, the tempera-

ture ranged from 101° to 103°.5 F., and since that time has been practically normal. The urine from April 12th to May 6th has averaged 31 ounces daily. The low quantity of urine secreted on two or three days can be accounted for by the number of loose stools induced by magnesia sulphate and castor oil. The urine from the remaining kidney is normal.

May 4. The patient to-day is sitting up, feels cheerful, good appetite and little discharge from the wound, which is nearly closed.

This case is of interest as it adds to the list another form of ureteral distortion productive of obstruction. It differs from the varieties described by Henry Morris, James Israel and others, and from the "Swan's neck" form described by Byron Robinson, in that the flexion occurred at the pelvic apex, which occupied the lowest point within the abdomen, and was surmounted by the greatly dilated kidney, lying in the transverse axis of the body.

The points of interest which have come up during the course of the case have been: (a) the complete restoration of the ureteral caliber as soon as the inflammatory bands were removed: (b) the resumption of secretory function shortly after the kidney was replaced and the ureter freed: (c) the gradual return of obstruction with infection of the kidney and pelvis, and (d) the excellent work of the remaining kidney since the left kidney was removed.

The one question which on "looking backward" stands out most glaringly is—would resection of the ureter and its implantation into the lower part of the pelvis at the first operation, have permanently restored its function, and saved the kidney? My own feeling is that the adhesions would have reformed and occluded the ureter.

60 West Fifty-Sixth Street.

INTRA-VESICAL OPERATIONS WITH THE AID OF THE CYSTOSCOPE

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SINCE the use of the cystoscope has become a practical and valuable procedure in the hands of competent and skilled operators, and since the operation-cystoscope has come into use, we are now able to accomplish ends which a few years ago were entirely unthought of. The removal of stones, foreign bodies, and small growths from the bladder, and cauterization with the electric cautery all under the guidance of the eye, and without the use of the knife, are procedures which are to-day being accomplished in favorable cases, by skilled operators. In the female bladder we can readily use the curette, forceps for removing foreign bodies, and the instillation syringe for applying solutions to localized areas in conjunction with the ordinary examination cystoscope, but at the same time independent thereof as far as the movements of these various instruments are concerned. On account of the shortness of the female urethra, it is an easy task to introduce any of these instruments, *viz*:— curette, forceps, or instillation syringe (which I will presently describe) into the bladder, after which the cystoscope can be introduced alongside thereof, thereby permitting of a wide range of motion of the operating instrument while the cystoscope is steadily focused on the part of the bladder which is being treated.

For the benefit of those who are unacquainted with the operation-cystoscope, I shall first exhibit a typical variety of such instrument which I have used successfully and then some simple and useful instruments designed and intended for use in the female bladder; the use of which in the manner which I will presently describe I believe to be original with myself.

The operation-cystoscope at present in use by me is that

PLATE VI—To Illustrate the Article by Dr. Henry Meyer.

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variety made after the ideas of Professor Nitze and known as the Nitze operation-cystoscope, which consists of three principal parts, *viz*:—

First—Lithotrite.

Second—Forceps.

Third—Snare and cautery combined in one, but capable of being used separately.

There are three cauteries of different shapes and sizes which are interchangeable by means of small screw marked A (Figs. 3 and 3x). Each one can carry its own snare.

The lithotrite (Figs. 1 and 1x) is capable of grasping and crushing a concretion three centimeters in diameter, the male blade being operated by a wheel marked "W." The forceps (Figs. 2 and 2x) have a bite 1¼ inches long and ⅓ of an inch wide, and is operated by either wheel marked "X." The snare and cautery (Figs. 3 and 3x), when set up, are in one piece, but capable of being used independently of each other. The snare is operated by an apparatus marked "B," whereby it can be made large or small, and when this instrument is ready for introduction into the bladder, the snare is not visible. Either snare or cautery can be heated by merely elevating the buttons marked "S" for snare, and "C" for cautery, situated on the cord attached to the instrument. However, both buttons should not be raised at once, as both cautery and snare will glow simultaneously. When both buttons are pressed down, both cautery and snare are cold; so that the snare can be used hot or cold.

Each of the instruments described above carries its own cystoscope, which is entirely removable from the rest of the instrument, and all movable parts are also removable for purposes of cleanliness. This set of instruments in the hands of those skilled in its use is certainly a valuable acquisition. The various parts are all intended for use both in the male and female bladder and are easier of introduction in the male than the ordinary cystoscope, since the ends of these instruments have a curve, as will be seen in the illustrations, while the ordinary cystoscope is usually bent at a sharp angle. Furthermore, when closed and ready for introduction, the lamp and window of the cystoscope are completely covered by the operating part of the instrument, thereby protecting both lamp and window from blood which

may possibly get on the same during its introduction in the male subject; while with the simple cystoscope it is not rare to get slight bleeding while introducing the same into the male bladder, which may cover the lamp and thereby diminish the power of illumination, or in event a drop gets on the window, it may make it impossible to get a satisfactory view. Thus this variety of operation-cystoscope being equivalent to a No. 26F sound in size, is usually easy of introduction, and in almost every instance insures a clear view.

In order to use any of the instruments constituting the operation-cystoscope, the patient should be thoroughly cleansed, the bladder should be irrigated until the washings return clear, after which it is distended with from 150 to 250 c.c. of a clear solution, preferably 4% boracic acid or 1/4000 formalin solution at ordinary room temperature. The cleansing of the instrument can be accomplished by removing all removable parts and boiling the same; this does not apply to the optical apparatus, however, which should not be boiled, but rubbed with tincture of green soap for ten minutes, after which it should be washed with alcohol, and then immersed in a 5% solution of carbolic acid for one hour before use, after which it should be washed with sterile water. The instrument being properly cleansed, it is put together and closed, lubricated with sterile glycerine and inserted. After the instrument is in the bladder, the cystoscope is slowly pushed in the direction of the patient until the lamp and window have emerged from their hiding-place, which can be determined by looking through the cystoscope. Thus you are ready for the operation. As stated before, in order to use this instrument successfully, one requires practice and more skill in the handling of scientific instruments than is possessed by the average man. So that before commencing operations with this instrument, one should study its mechanism, which is simple, and should manipulate it both in the phantom and human bladder until dexterity and precision are acquired in its use.

I will now cite two cases in which I have used this instrument successfully and with no difficulty.

Case 1. Mr. C. G., age 41, married, consulted me October 28, 1905, giving a history of painful and frequent micturition which had existed for an indefinite period. He had been

treated on several occasions with internal medications and irrigations for catarrh of the bladder; he also had sounds passed, but continued to get worse. The urine passed in two glasses was the same, both being turbid and containing pus, some red blood cells and bladder epithelium. A cystoscopic examination showed a small concretion in the bladder, which appeared to be about 1½ centimeters in diameter and fairly round. With the assistance of Dr. L. H. Hoffman, I removed the same with the aid of the lithotrite pictured above (Figs. 1 and 1X). This concretion being quite small and fragile, it was only necessary to grasp and crush it twice. After the first crushing it could be readily seen, through the cystoscope running through the instrument, that a fragment was left too large to come through the ordinary evacuating catheter, but this was readily grasped and crushed and all evacuated with the Bigelow evacuator. I have since examined this patient and no fragments can be seen with the cystoscope, and he now enjoys perfect health.

Case 2. Mr. S., age 21, had a calculus; the diagnosis was made by his own physician. On examination this calculus was found to measure ⅝ of an inch in diameter. Cystoscopic examination showed it to be very dark in color (almost black), and with a very rough surface. On Dec. 27, 1905, in the presence of Dr. Louis Gross and Dr. Albert Abrams, I removed this concretion with the operation-cystocope. In this instance also, the stone was crushed twice, as it could readily be seen through the cystoscope, after the first crushing, that a fragment was left too large to come through the evacuating catheter. The crushing operation was done with no difficulty; and in both instances the stones were grasped at once and with the greatest ease. On Jan. 6, 1906, a cystoscopic examination showed the bladder to be entirely free from any fragments, and the patient is well.

After having removed calculi by other methods, I am of the opinion that this is the best and most satisfactory for removing stone from the bladder in any case which is favorable for the use of this instrument, because you see the field of work.

Having described the operation-cystoscope and some of its uses, I now come to a subject that I desire to speak of, *viz*:— The use of various instruments in the female bladder, together

with the ordinary examination cystoscope. Everybody cannot use an operation-cystoscope successfully, but any expert cystoscopist can use a long pair of forceps in the female bladder, such as is illustrated in Fig. 4, together with the ordinary cystoscope, for removing foreign bodies,—for the removal of ureteral calculi which are sometimes found protruding from the ureteral orifice, and which I have done on two occasions with this instrument. I desire to call attention to the fact that the shank of this instrument is quite thin, with a sharp pointed alligator-mouth working from the handle, and corresponds closely to the ordinary urethral forceps made for removing foreign bodies from the urethra, except the mouth is pointed and the shank is thinner.

Again, anybody skilled in the use of the ordinary cystoscope, can use the curette of my pattern (Fig. 5) in the female bladder in conjunction with the ordinary examination cystoscope. This curette I made for the purpose of curetting a slough from the center of a single ulceration in the female bladder (which later healed under the use of iodide of potash) and also removed a concretion which was imbedded in the wall of the bladder in another female subject; it was easily lifted from its bed under the guidance of the eye with this instrument, and removed later with the forceps pictured in Fig. 4. I have since used this curette several times over small areas of ulceration in the female bladder, but I am not yet prepared to speak of the results of this treatment. This curette is not very blunt, nor is it sharp; it is nine inches long, two inches of which consists of the handle. The shank is 1/16 of an inch thick, yet strong, being made of steel. I also have one of copper, capable of being bent if desired. The loop, or curetting end, is ½ inch long and 3/16 of an inch wide. It is readily inserted into and removable from the female bladder without scratching the urethra.

I further desire to present a syringe (Fig. 6) designed and made by myself for making instillations of nitrate of silver or other solution directly to any spot in the female bladder with the aid of the ordinary examination cystoscope. This instrument also possesses a long thin shank, being 7 inches long and 1/16 of an inch thick, the tip of which is surrounded by an olive point, thereby making it easy of introduction and extraction. The

proximal end is mounted with an ordinary hypodermic syringe which can be unscrewed for purposes of filling the same. The lumen of this instrument is fine, permitting the solution to be used drop by drop. This instrument can also be bent if desired, provided a wire be inserted into its lumen before bending, so

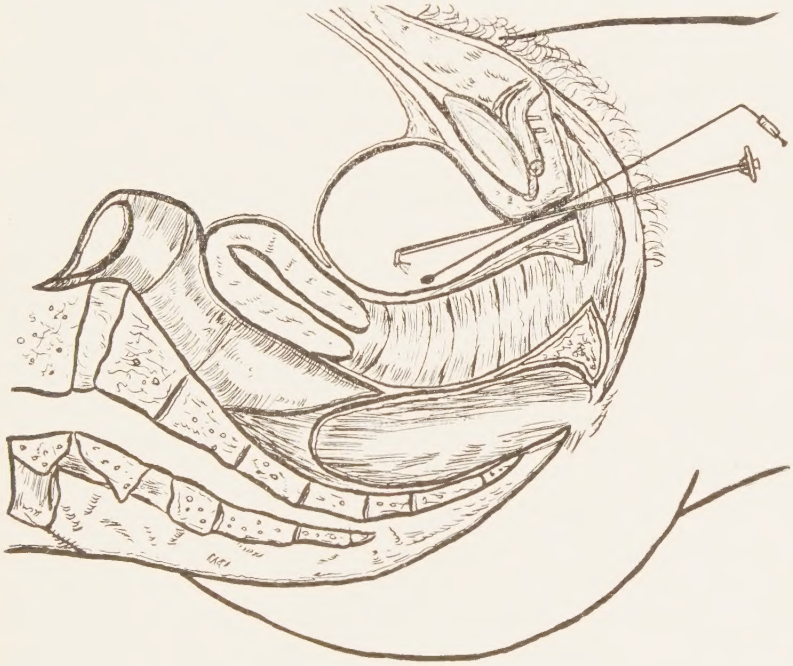

FIG. 7.

as not to obliterate the same. This instrument is always used with the bladder distended with air.

The principal feature of all the instruments described as Figs. 4, 5, and 6, is that the shanks are very narrow, thus occupying a minimum amount of space in the urethra after they are introduced. The technique of the use of these instruments is most simple. After taking the usual antiseptic precautions in regard to patient and instruments, the bladder is washed with a 4% solution of boracic acid until the washings return clear. The bladder is then distended with the same solution, or air, as seems best to the operator in the individual case. (Always use air when employing the instillation syringe.) The operating

instrument is then lubricated with sterile glycerine and inserted into the bladder and held by an assistant. The cystoscope is next lubricated with the same lubricant and inserted alongside of the first instrument introduced, and the bladder examined until you have in view the spot or place desired for the use of any of the instruments just described. The cystoscope is steadily held in position with one hand, while with the other you will be able to move the operating instrument freely and with a wide range of motion, capable of touching any part of the female bladder which can be seen through the cystoscope, and at the same time see what you are doing.

With a little practice one will be surprised with what degree of accuracy one can work, and the wide range of motion which can be obtained in any direction desired. After the operator has finished the use of any of these instruments, the cystoscope should always be removed first, and then the operating instrument. The cystoscopes which I have been using in the female bladder in connection with the other instruments described, are Nos. 22, 18, and 15F. Usually I have no difficulty using a No. 22F. If, however, the urethra be narrow, I use a smaller cystoscope.

In conclusion I desire to say:

First—That the Nitze operation-cystoscope is a practical instrument for selected cases and that it can be used successfully by those who will give sufficient time to practice with the same, until they become skilled in its use, before commencing to perform operations.

Second—That on account of the shortness and comparative straightness of the female urethra, it is easy to operate in the female bladder under the guidance of the eye, using any of the instruments above described together with the ordinary examination cystoscope, or with any instrument capable of passing through the female urethra, so long as the shank of such instrument is narrow and occupies a minimum amount of space in the urethra. This method of operating in the female bladder will be found simple to anybody accustomed to intra-vesical manipulations and skilled in the use of the cystoscope. Other instruments can readily be made to be used for such purposes as cauterization, or snare work, all to be used in the same manner, thereby accom-

plishing ends for which bladders are often opened. I am sure that these methods of operating will save some people whose cases are favorable for these procedures from undergoing cutting operations, thereby saving time and suffering to the patient. If I have accomplished those ends in some cases, I will feel sufficiently rewarded.

DESCRIPTION OF ILLUSTRATIONS.

PLATE VI.

Fig. 1. Lithotrite ready for introduction.

Fig. 1 x. Lithotrite, after introduction, ready for use.

L—Lamp for illuminating bladder.
W—Wheel for operating male blade.
W′—Window of cystoscope.

Fig. 2. Forceps ready for introduction.

Fig. 2 x. Forceps after introduction, ready for use.

L—Lamp for illuminating bladder.
W—Window of cystoscope.
X—Wheel for opening and closing forceps.

PLATE VII.

Fig. 3. Cautery and snare ready for introduction.

Fig. 3 x. Cautery and snare, after introduction, ready for use.

A—Screw by which other cauteries may be inserted.
B—Apparatus for controlling and moving the snare.
C—Button on cord to heat cautery.
L—Lamp for illuminating bladder.
S—Button on cord to heat snare.
W—Window of cystoscope.

Fig. 4. Forceps described above.

Fig. 5. Curette for use in the female bladder.

Fig. 6. Instillation Syringe.

Fig. 7. Showing two instruments lying side by side in the female bladder.

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